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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,938	03/19/2004	John Link	10031165-1	8132

7590 06/26/2007

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EXAMINER	
CROW, ROBERT THOMAS	
ART UNIT	**PAPER NUMBER**
1634	

MAIL DATE	DELIVERY MODE
06/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/804,938	**Applicant(s)** LINK ET AL.	
	Examiner Robert T. Crow	**Art Unit** 1634	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 25 May 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: *None*.
   Claim(s) objected to: *None*.
   Claim(s) rejected: *1,3-15,20 and 21*.
   Claim(s) withdrawn from consideration: *16-19*.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

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SUPERVISORY PATENT EXAMINER

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments on pages 7-8 of the Remarks filed 25 May 2007 regarding the lack of a rejection under 35 USC 103(a) as obvious over Sambrook et al in view of Wang et al is irrelevant because claim 2 has been rejected under 35 USC 103(a) as anticipated by Sambrook et al in view of Wang et al and further in view of Wang et al '742. While the claim has not been rejected using the first two references, the lack of a rejection is not an admission of patentability of the claimed invention, thus the argument is irrelevant.

Thus, because claim 2 was previously rejected under 35 USC 103(a) as obvious over Sambrook et al inv view of Wang et al '727 and further in view of Wang et al '742, newly amended claim 1 would be rejected for the reasons as set forth in the rejection of the previous version of claim 2 as outlined in the Office Action of 26 March 2007. The limitations of newly amended dependent claims 3-15, and 20-21 would be based on the rejections of the claims as set forth in the Office Action of 26 march 2007.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant's arguments on page 8 of the Remarks regarding the rejection of the previous version of claim 2 refer to Sambrook et al and Wang et al '742; however, the previous rejection of claim 2 also relied upon Wang et al '727. Because the arguments on page 8 do not address Wang '727, the arguments represent piecemeal analysis of the references, and thus attack the references individually where the rejections are based on combinations of references.

Applicant further argues on pages 8-9 of the Remarks that the glass wool membrane of Sambrook et al is not a membrane as disclosed and claimed in the present application.

However, a cursory review of the specification yields no limiting definition of a "membrane," other than that the membrane performs a passive role by acting as a physical barrier to a precipitate (page 20, paragraph 0070 of the instant specification). Further, the previous version of claim 1 merely recited "said isolation column comprises a membrane," and presented no further structural limitations of the claimed membrane. Thus, as indicated in the previous Office Action, the glass wool of Sambrook et al is a membrane because a "wool" comprises a multi-fiber interwoven structure (i.e., a membrane) having spaces between individual fibers (i.e., pores). The fibers and pores thus form a passive physical barrier within the column, and the claim has been given the broadest reasonable interpretation consistent with the specification (In re Hyatt, 211 F.3d1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000) (see MPEP 2111 [R-1]).

Applicant further argues on page 9 of the Remarks that the glass wool merely provides support for the packed oligo-dT cellulose. Thus, by Applicant's own admission, the glass wool is a passive physical barrier; i.e., is a support acting as a physical barrier to a precipitate ad defined on page 20, paragraph 0070 of the instant specification. The glass wool is therefore a membrane as outlined above.

In response to applicant's argument on pages 9-10 of the Remarks that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Wang et al '727 further teach that a single cRNA has the added advantage of allowing quantitation of mRNA as well as acting as a internal standard template for reverse transcription reactions (column 8, line 65-column 9, line 23).

It would therefore have been obvious to a person of ordinary skill in the art at the time the claimed invention was made to have modified the method of preparing an RNA sample substantially free of contaminants as taught by Sambrook et al to prepare cRNA as taught by Wang et al with a reasonable expectation of success. The ordinary artisan would have been motivated to make such a modification because said modification would have resulted in a method of preparing a cRNA sample substantially free of contaminants having the added advantage of purifying an RNA that has the added advantage of allowing quantitation of mRNA as well as acting as a internal standard template for reverse transcription reactions as explicitly taught by Wang et al (column 8, line 65-column 9, line 23).

Further, Wang et al '742 teach the use of solid phases in the form of asymmetric microfiltration membrane materials (Abstract, lines 1-2) comprising PVP (i.e., polyvinylpyrrolidone) co-cast with polysulfone (Abstract, lines 7-11) for filtering biological samples (e.g., whole blood; Abstract, lines 11-12) with the added advantage that the membranes are highly useful in the quick detection of components contained in liquid samples (Abstract, lines 14-16).

It would therefore have been obvious to a person of ordinary skill in the art at the time the claimed invention was made to have modified the method comprising a membrane as taught by Sambrook et al and Wang et al with the membrane as taught by Wang et al '742 with a reasonable expectation of success. The modification would result in the use of the asymmetric microfiltration membrane of Wang et al '742 in place of the glass wool membrane of Sambrook et al. The ordinary artisan would have been motivated to make such a modification because such a modification would have resulted a method of preparing a cRNA sample substantially free of contaminants having the added advantage of allowing the quick detection of components contained in liquid samples as explicitly taught by Wang et al (Abstract, lines 14-16).

Applicant argues on page 10 of the Remarks that because the separation mechanism is still based on the oligo-dT cellulose of Sambrook et al, there is no motivation for the addition of the membrane of Wang et al '742.

However, as noted above, the replacement of the asymmetric microfiltration membrane materials for (rather than addition to) the

glass wool membrane would have resulted a method of preparing a cRNA sample substantially free of contaminants having the added advantage of allowing the quick detection of components contained in liquid samples as explicitly taught by Wang et al (Abstract, lines 14-16).

In addition, the modification of replacing the glass wool membrane of Sambrook et al with the asymmetric microfiltration membrane of Wang et al '742 represents a combination of equivalents known for the same purpose; i.e., a filtration barrier. The courts have held that it "is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). See MPEP 2144.06.

The remaining arguments regarding dependent claims 7-9 on pages 10-11 of the Remarks rely on arguments set forth to address the rejections of independent claim 1 under 35 USC 103(a). These arguments are discussed above. applicant has presented no further arguments not already discussed. Since the arguments regarding independent claim 1 were not persuasive, the rejections of the dependent claims would be maintained.

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